INTERVIEW WITH BILL BUTLER APRIL 16, 2004 BY DR. MARK MADISON NCTC SHEPHERDSTOWN, WV

MR. BUTLER: Hi, my name is Bill Butler. I am 59 years old. I was born in Memphis, TN on December 27, 1944.

DR. MADISON: When did you started working for USFWS?

MR. BUTLER: It was later in life. We moved from Memphis to Cleveland to Chicago and finally to California where I went to high school and college. I was always interesting in flyways. I actually saw a copy of Flyways while I was in high school. I began to be fascinated with becoming a pilot/biologist. But I didn't really realize that dream right away either. I went to college first at University of California at Davis. When I graduated from there, I went into the Navy and became a pilot. When I got out of the Navy I went back to college and got a master's in wildlife at Arizona State and went to work for the Bureau of Reclamation. But I still had in my mind that I wanted to be a pilot/biologist. After working for Bureau of Reclamation for a few years I talked to by wife about becoming a pilot/biologist. There aren't that many of those jobs. I got the Conservation Directory. I don't know if you're familiar with that but is has all of the natural resource agencies in the country. I looked in that and found all of the ones that may have pilot/biologist positions and I wrote letters to them. It took about a year and it became pretty obvious that I was going to have to go where pilot/biologist positions were located. A job came available in Bethel, Alaska on the Yukon Delta NWR. I applied and it was in 1982 that I got a job as a wildlife pilot/biologist on the Yukon Delta NWR. We went up there and I stayed in Alaska for about twelve years. After three years on the refuge, I worked on Canada geese, and a position came open in migratory birds to develop goose surveys throughout the State. I applied and was fortunate enough to get that job. I worked up there for total of about twelve years. When we first went to Alaska, my wife wasn't all that enamored with the idea. But we spent twelve years and she decided that she needed to leave. I was really reluctant to go because it was kind of a lifetime dream to get a pilot/biologist position like that in Alaska. We decided to start looking for jobs and the position of Aviation Manager in FWS came open. I decided to apply for that in 1994 and I was fortunate enough to get it. We moved to Washington, D.C. and basically I've been there ever since functioning as the National Aviation Manager for FWS. As part of that I continue to work with migratory birds and continue to conduct surveys and be responsible for the central Ontario strata in the breeding pairs survey. I've also continued to do some winter waterfowl surveys.

MR. MADISON: That's great.

MR. BUTLER: In some ways it's been a... I've been able to stay in touch with the biology as well as move into more of the oversight and management of the aviation program.

MR. MADISON: Well, let's trace that evolution. When you first went up to Yukon Delta, what was it like in 1982?

MR. BUTLER: Well, it's been a long time ago now. I can remember after looking for that type of job for a year. My wife and I sat down and discussed it. I told her that if I was really ever going to realize this dream we would have to go to some place like Alaska. She said it would be okay. If I could find a job, she would go with me. If it was something with, I mean, Bethel is 400 mile east of Anchorage. It's a native community that is about 50% Upik Eskimo and 50% white. It's very much like moving to a third world country. The interesting thing about that is that as soon as we put in into our mind that we were going to get a job like that, she said that if this is what it would take, we'd go together. The funny thing about it was that I didn't have a float rating when I first went up there. I had gotten accepted for the job and had given them my application. They called me and told me that I was going to be de-selected because I didn't have the float rating. I called up the Assistant Director of Refuges. I think his name was John Redforn. He told me not to worry and to go get the float rating. If I could get it, I still had the job. I went to the Salt and Sea. There was a J-3 Cub floatplane at the Salt and Sea. I went there and in two days got the float rating. I called them back up, sent it to Personnel and we were on our way to Alaska. In the interim there, when my wife knew we were going to Bethel, the Refuge Manager sent us the local paper. She applied for a job in the native hospital in the Strept Surveillance Program. She had a degree in Bacteriology. She was actually accepted for her job in Bethel before they finally accepted me, which I thought was kind of interesting. Anyhow, we both went to Bethel and I would say that it was one of the best experiences we've ever had. I think she would say the same thing. We were getting to know the native culture. We were in Bethel for three years before we moved back to Anchorage, but it was a wonderful experience.

DR. MADISON: Now, you were flying up there. Would did you have as observers when you were there?

MR. BUTLER: When I started the project with Migratory Birds, to do the goose surveys I worked with a Biologist up there whose name was Bill Eldridge. He was my observer for ten years. He and I together probably conducted one of the more consistent goose surveys that's ever been developed and done. In the ten years since I left, they have continued to do that survey and I think now they are using the data as part of the management information they use to manage Cackling Canada Geese. When I went up there it was a very interesting time because goose populations in the pacific flyway were at their lowest level in history. They managed them using winter ground counts. In the mid 1960s the winter counts of Cackling Canada Geese were over a million birds. In the year that I got up there, 1982, that count had dropped to forty-five thousand. It was a subsistence species for Upik Eskimos. When I got there they would egg nests every spring. They would drive geese into traps. Even today, they still mostly live a subsistence lifestyle. It was a particularly satisfying because people's lives, essentially, depended on our management of these geese. It was very satisfying to participate in a program that improved the information to manage the population. And over the time I was there for then years, the population went from the forty-five thousand estimates to

over a quarter of a million. Now, I think it's fully recovered. I am not sure what the most recent estimates are.

DR. MADISON: That's great! What was it like, flying in Alaska?

MR. BUTLER: It was very enjoyable. Even now, in the lower 48 flying is a much more complicated situation from the standpoint of airspace, and just rules and regulations. In Alaska, it's still...well here's a good example. When I moved from Alaska down here, flying even in the Washington, D. C. area, I was used to flying in Alaska where it's not exactly by the seat of your pants, but you learn to fly by the terrain; the rivers, the mountains and it was much tougher down here. When you look down on the ground here, all you see is highways and towns. It took me anyway, a much longer period of time to get used to it. I had to start flying by instruments in the D. C. area! It was hard to tell where you were, and you had to be very careful that you were where you needed to be, particularly after September 11, 2001. One that was really dramatic...there are no power lines in Alaska. We fly at 150 feet. We fly along rivers. In Alaska, there was one power line that I became aware of. It was down by Homer. I actually flew under it without knowing it! It was up the side of the hill about 500 feet. You just never think of power lines there. Here, it's like your mindset has to be, "There IS a power line, everywhere you fly!" It's the same as there is always a car in my rearview mirror down here. If you change lanes, you might expect for one to be there. That was a different mindset. It makes the flying less enjoyable. You could really concentrate on flying the country you were in. Here you have to be aware; there is much more danger from other aircraft. So the flying in Alaska was truly enjoyable.

DR. MADISON: What was the work like when you became Aviation Manager?

MR. BUTLER: It was totally different in a sense. I mean, as a pilot/biologist one of the attractions other than the flying, is that you are very autonomous. This is to the extent that I can't think of any other job in the government that offers you that kind of autonomy and ability to make your own decisions. When you move into a position like the National Aviation Manager, there are many more things...the decisions you have to make and the people you have to deal with, it's a little more political. And while I have enjoyed it, nothing was more enjoyable that the pilot/biologist position that I had in Alaska. But I've been able to maintain...and it's fortunate that FWS allowed me to continue to function as a pilot/biologist while assuming the management responsibilities of the National Aviation Manager. That has made the job that much more enjoyable. There are some aspects of this job, like; I've been intimately involved in trying to get a new survey airplane. That's been a very satisfying part of this job. If you can successfully do that, you will have made a contribution that benefits the Service and all of the other people that are flying the surveys. That's been the satisfying part of it.

DR. MADISON: How have the planes changed since you started?

MR. BUTLER: Interesting enough, the planes haven't changed so much as the equipment, or the electronic; GPS type capabilities that are now available. When I first

went to Alaska, even in my twenty-five year career, it's a good change. In Alaska there weren't a lot of aides to navigation. When I first went up there, you learned the terrain and you flew based on your knowledge of the area. There were a few ADS stations on the coast. If you can imagine, you fly from Anchorage across the Alaska Range west, it's about 430 miles to Bethel. And it's another 120 miles when you are on the Bering Sea. Go another 400 miles and you're in Russia! There were a couple of ADS stations where you could get bearing off of and they could help you find where you were. About that time Loran, which is was actually used to navigate boats came into vogue. It really enabled us. Just think about it; it that location at the mouth of the Yukon River, 500 miles from the nearest city of any size, we were able to use Loran-C to accurately fly transect lines. One of the problems with Loran however, was that the reception change. There was a 230-mile change in latitude on that coast. The error would increase in this Loran system so that when you were halfway through your survey, all of a sudden you might be a mile or two off. But, it was a quantum leap, compared to what we did before. The early guys flew their transect lines basically by lining up with mountains and things they could see. I don't know, to this day, how they did it. When you get lost at 150 feet, or if at least, you lose track of your transect line you've got to climb up to 5,000 feet find yourself and go back down. With the advent of GPS you are able to fly to with several hundred meters of accuracy in a place as remote as the Yukon Delta. It's revolutionized the quality of information you can collect from an airplane. When you have guys like Jack Hodges who have written computer programs, where the computer is hooked up to your GPS and your intercom system. In real time you record observations; species and group size and get a coordinate, a position of that observation that's accurate with 100 meters. One of the things we did on the Yukon Delta; the native lands were part of the Alaskan Native Claims Settlement Act. Even within this FWS, which was about nineteen million acres, which by the way, is about the size of Pennsylvania, there were only about 13 staff people. One of the things that the new technology allowed us to do was to get really accurate distributions of these species that were really important to the native communities. We could look at what the relative importance of these native lands to the various species, versus the refuge lands. It was really important information to the natives and to us, to help manage those populations. They've started to incorporate that into the North American Breeding Pair survey. They are starting to use the point locations to relate... if you think about thousands of miles of basically featureless terrain, how do you relate the distribution of observations from the air to various habitats? The early way was that you had sixteen-mile segments. If the smallest unit of accuracy is a sixteen-mile segment, it's hard to relate it to the highly accurate satellite habitat maps. But now that we have this capability to do accurate point locations you can really start using aerial surveys. You get highly detailed maps over thousands of miles of featureless terrain that can be compared to satellite habitat. It's revolutionary, no doubt about it.

DR. MADISON: Yeah, this has come up again and again; Jack Hodges and some of the technological changes. Let me ask you another question. I ask it of all pilots. [End of side A]any close calls when you were a pilot?

MR. BUTLER: Well, I don't know if I've had...I had one engine failure in my career. It was a pretty interesting story. It was shortly after I went to Alaska that I started flying a

standard Beaver, which was a radial engine and a very good airplane. I had several situations where the engine began to run rough. I always had enough altitude that before we had to do an emergency landing, we got it going again. I went back to our maintenance people and we'd talk about it. They would recommend that I do certain things, and I kept trying to do that. But nothing seemed to work. Finally, I was taking off from a field camp at a place that was called Konogiak. It's about 120 miles west of Bethel. It's about a 2,500-foot long lake. I initiated the takeoff. We got about 300 feet in the air and the engine quit again. That time we weren't high enough and we couldn't restart the engine. Fortunately, there was a slough right below me. It was basically just a straightforward emergency landing. In other words, I landed in the slough and taxied back. But this time I said, "Hey, I'm not flying this plane again until you guys figure out what's wrong with it!" It turned out to be a kind of insidious thing that was kind of difficult to detect. The magnetos had gotten wet at some point in the past and it resulted in an intermittent loss of power. You couldn't, even though they had me...you do power checks before takeoff. We did power checks and never detected anything. What the rust did was that somehow intermittently short out the points in the magneto. When that happened the engine ran rough. When the engine ran rough it would plug up the spark plugs. As long as it happened to you and your were 5000 feet in the air, by the time you descended a little bit, you could get the engine going again. But when it happened at 300 feet, you couldn't. So that was...it wasn't really a close call, it actually helped my confidence. I realized, 'Hey, you had an engine failure and you were able to handle the emergency. Nothing happened to you or the people with you, or the airplane.' So from that standpoint it was a good learning experience.

DR. MADISON: Speaking of learning, and as someone who has been in the field a long time, what advice would you pass on to people just entering as pilot/biologists?

MR. BUTLER: I have a lot of young and aspiring people. I guess the advice I have for them is what you put into mind is going to become your experience. If you really want one of these jobs, put it into your mind. Write down your goals, and then every action you take after that will take you one step further to getting one of these positions. I really think it's true. There are not that many people who have the interest and ultimately get the experience required. If you really want it, and you put it in your mind, you can get it. I have seen people do it. John Solberg is a good example. He got on permanently with the government as a Secretary in Alaska. He always used to talk to me about becoming a pilot biologist. After getting on permanent, he got his own pilot's license and ultimately became a pilot/biologist. It's a wonderful career, and like I say, if you really want it, it's there to be had.

DR. MADISON: What's the most important thing you've learned in your career?

MR. BUTLER: I guess, I mean it's to really enjoy what you're doing. I mean, really appreciate it. When I left Alaska...I can remember with I first went up there and I first got the job it was a situation where, and it's rare in my life when I've felt this, I couldn't wait to get up in the morning and go to work. You need to cherish that kind of feeling because they don't last that long. I would just remind that once you've achieved it, enjoy

every minute while you're doing it. We are in one of the few jobs, and I think the people that have them truly love the work. It's something that we need to appreciate.

DR. MADISON: That's great! Your thirty minutes are up! It goes really fast doesn't it?